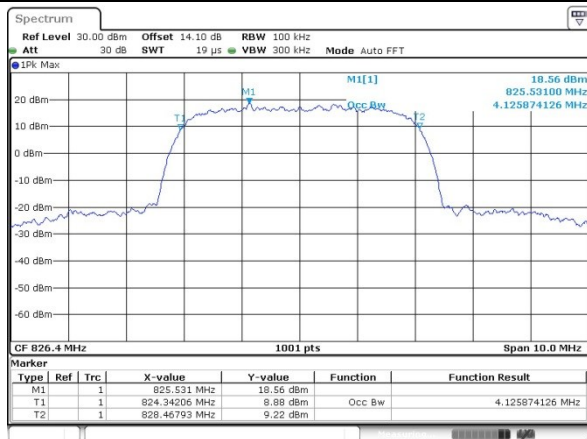




WCDMA Band V (RMC 12.2Kbps)

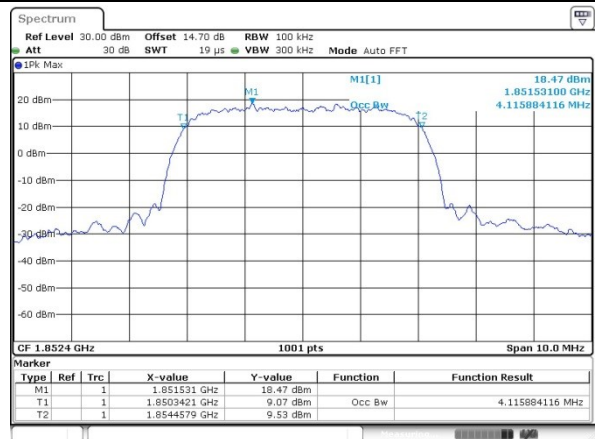
Lowest Channel



Date: 30 MAR 2019 15:00:42

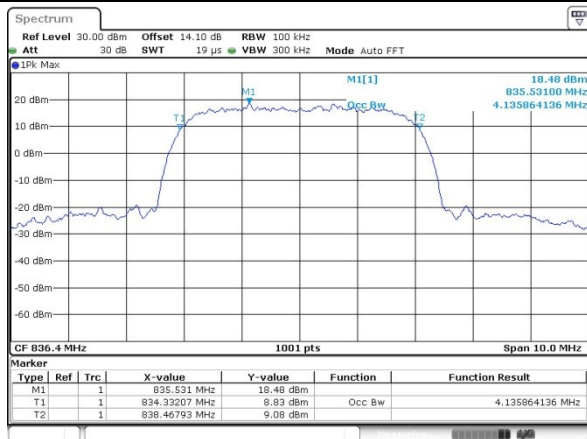
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



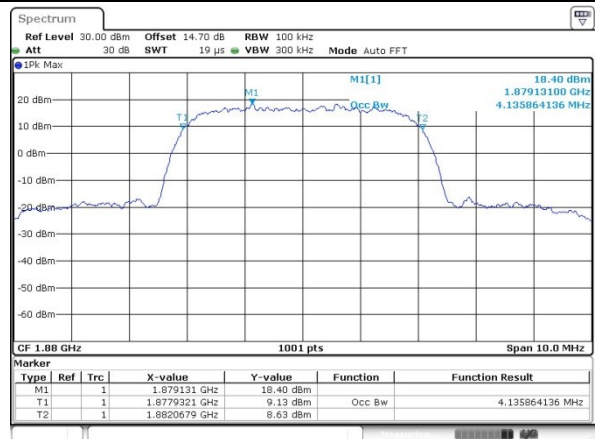
Date: 30 MAR 2019 14:24:37

Middle Channel



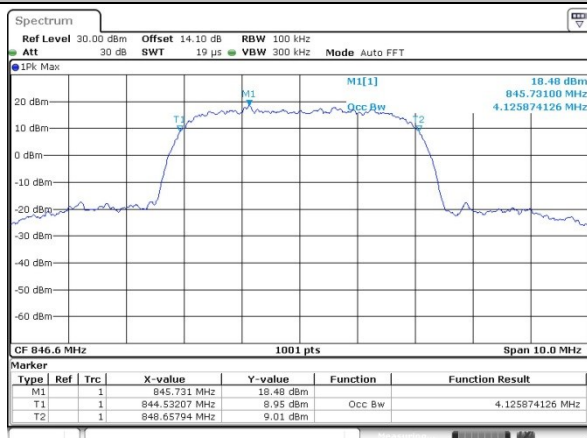
Date: 30 MAR 2019 15:01:12

Middle Channel



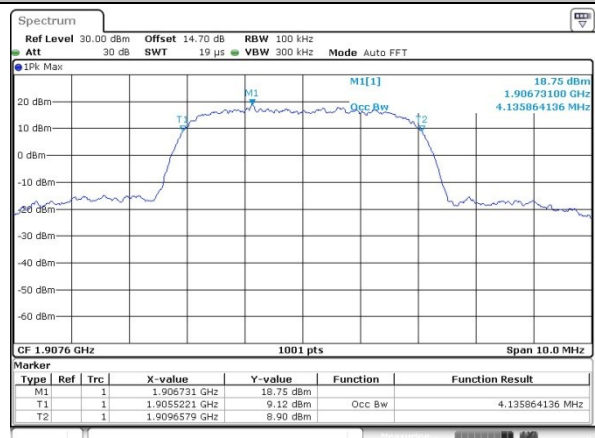
Date: 30 MAR 2019 14:25:10

Highest Channel



Date: 30 MAR 2019 15:01:54

Highest Channel

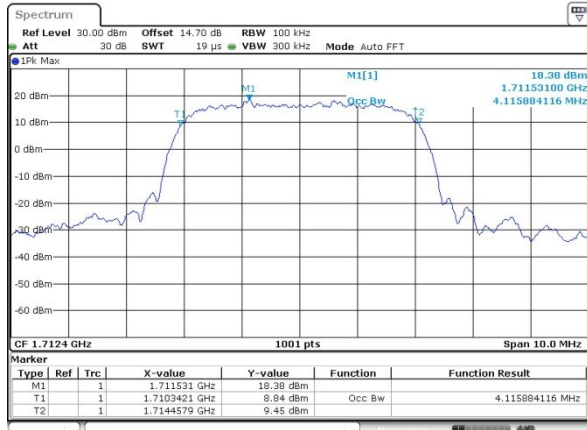


Date: 30 MAR 2019 14:25:44

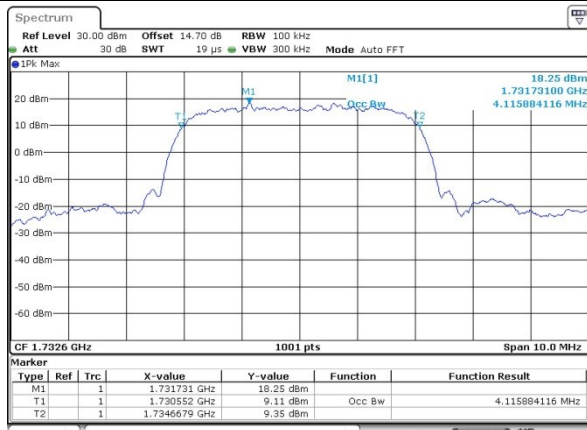


WCDMA Band IV (RMC 12.2Kbps)

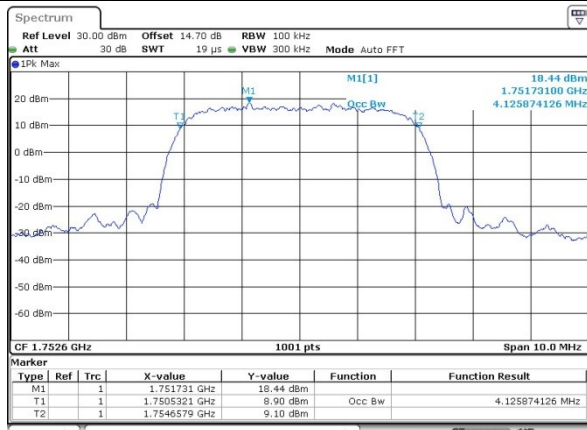
Lowest Channel

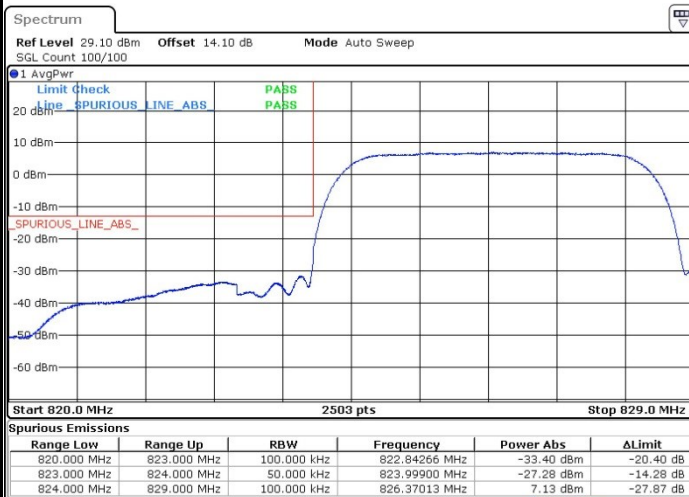
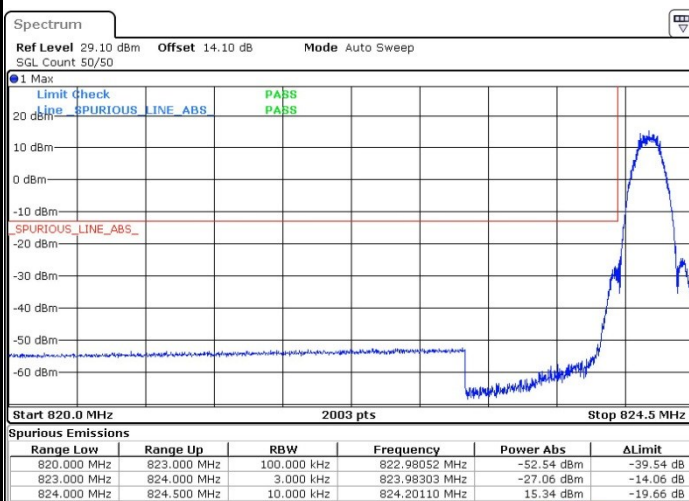
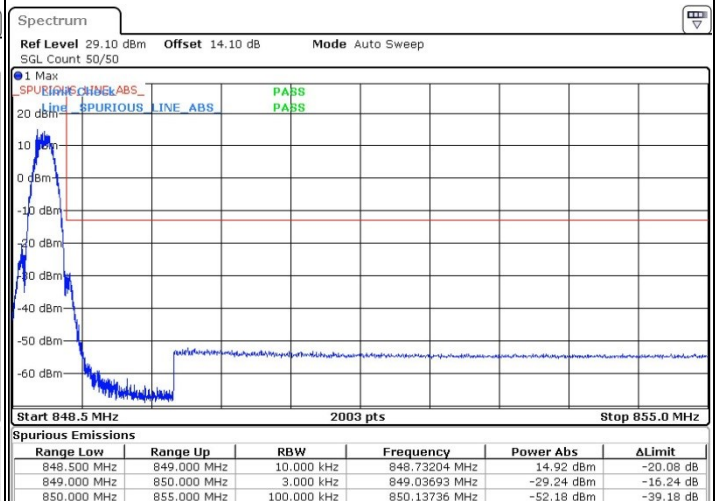


Middle Channel



Highest Channel

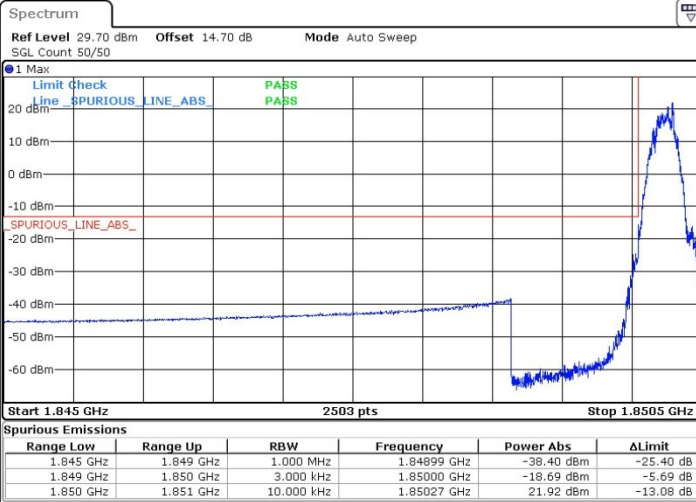


**Conducted Band Edge****GSM850 (GPRS class 8)****Lowest Band Edge****Highest Band Edge****GSM850 (EDGE class 8)****Lowest Band Edge****Highest Band Edge**

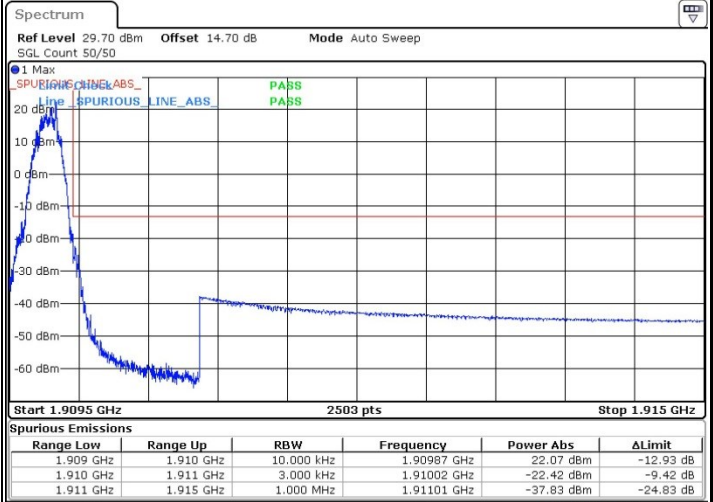


GSM1900 (GPRS class 8)

Lowest Band Edge

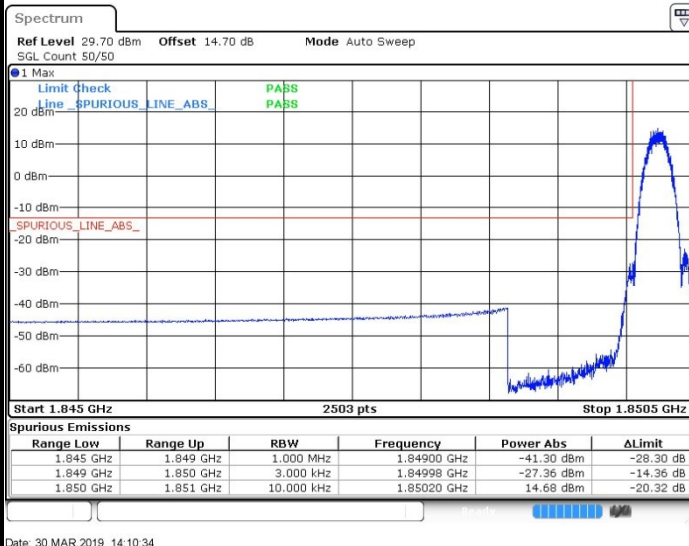


Highest Band Edge

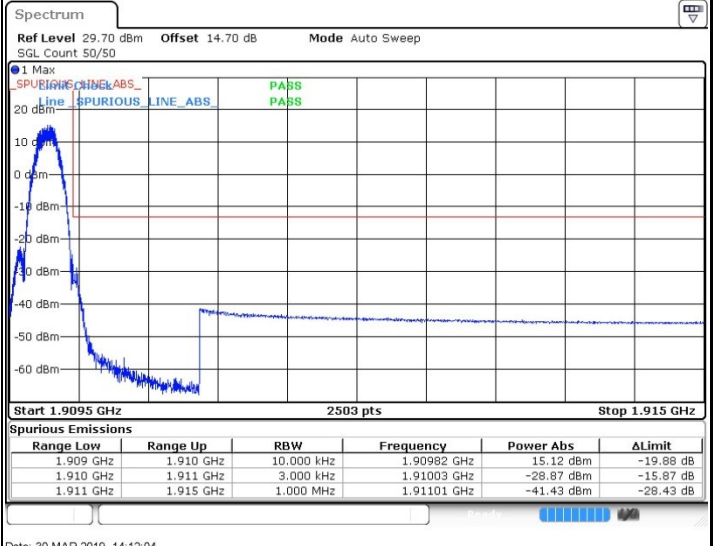


GSM1900 (EDGE class 8)

Lowest Band Edge



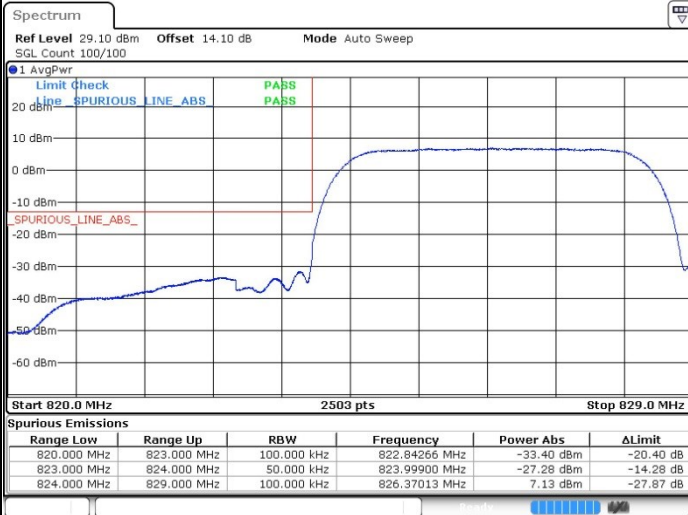
Highest Band Edge





WCDMA Band V (RMC 12.2Kbps)

Lowest Band Edge

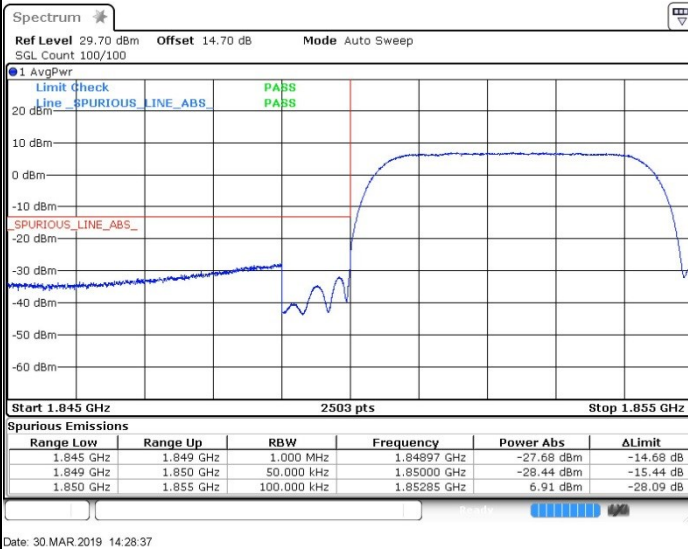


Highest Band Edge

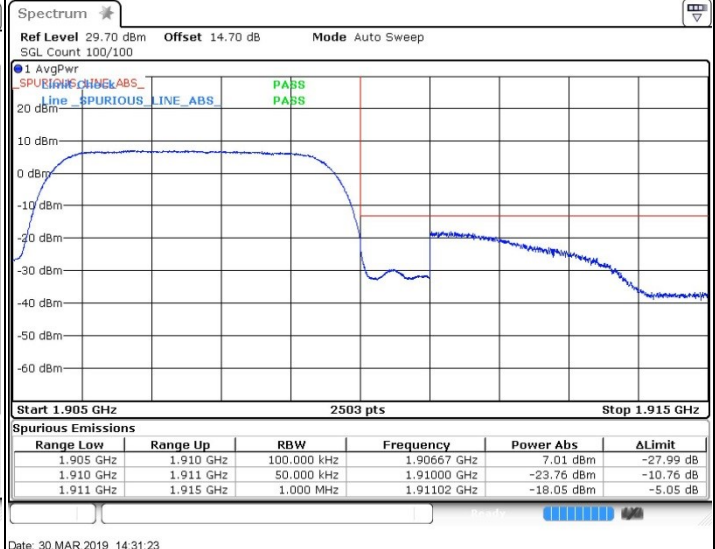


WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge



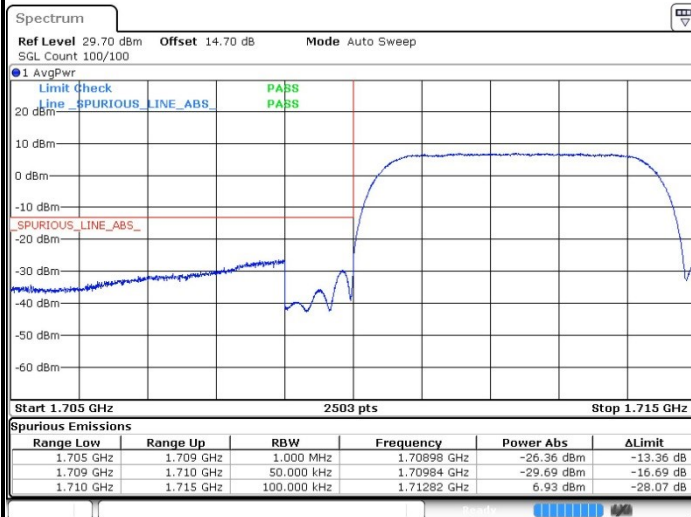
Highest Band Edge



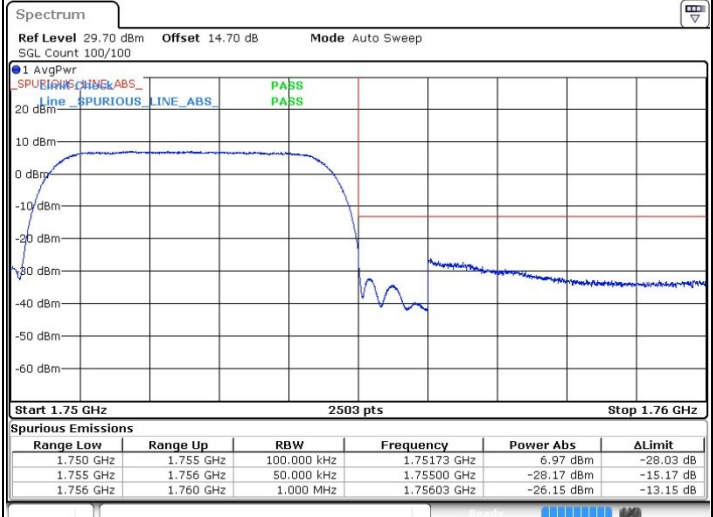


WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge



Highest Band Edge

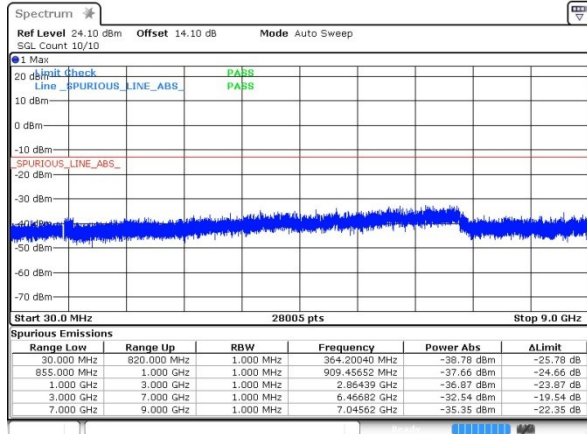




Conducted Spurious Emission

GSM850 (GPRS class 8)

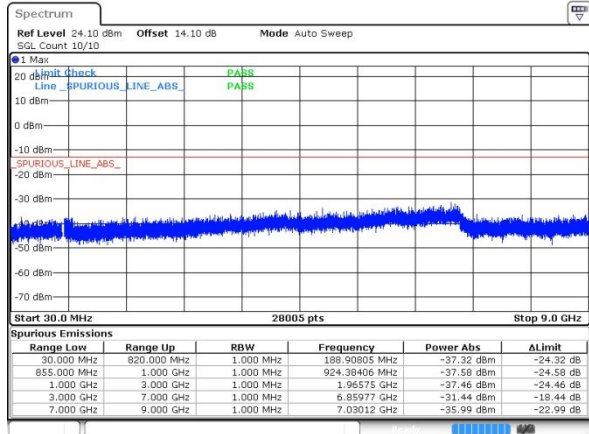
Lowest Channel



Date: 30 MAR 2019 13:18:01

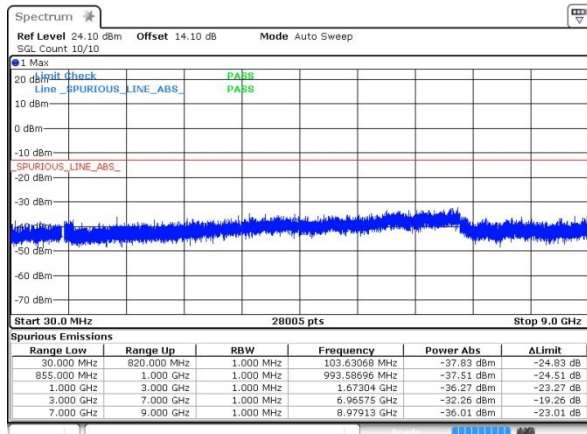
GSM850 (EDGE class 8)

Lowest Channel



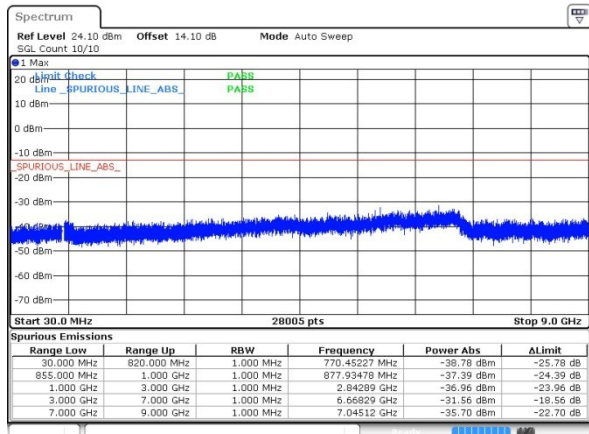
Date: 30 MAR 2019 13:35:55

Middle Channel



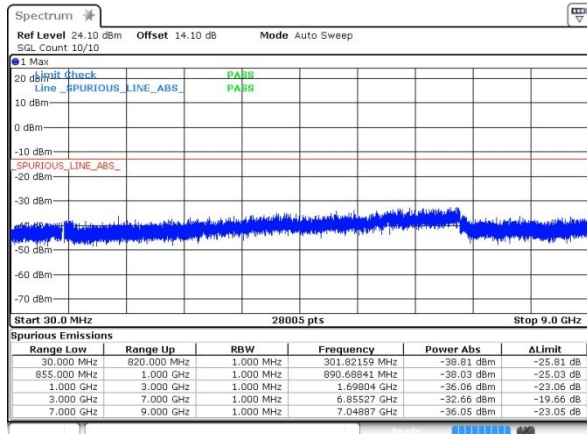
Date: 30 MAR 2019 13:19:57

Middle Channel



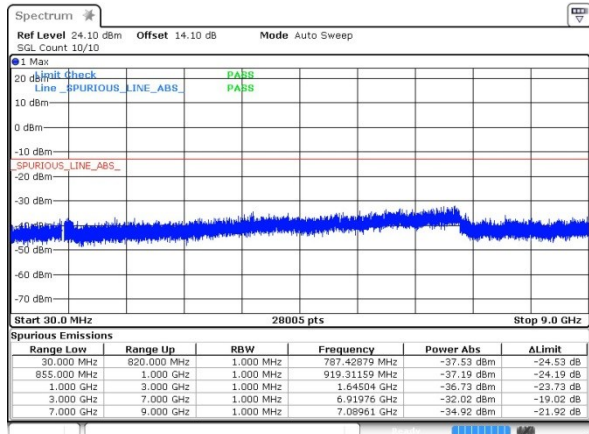
Date: 30 MAR 2019 13:37:34

Highest Channel



Date: 30 MAR 2019 13:21:20

Highest Channel

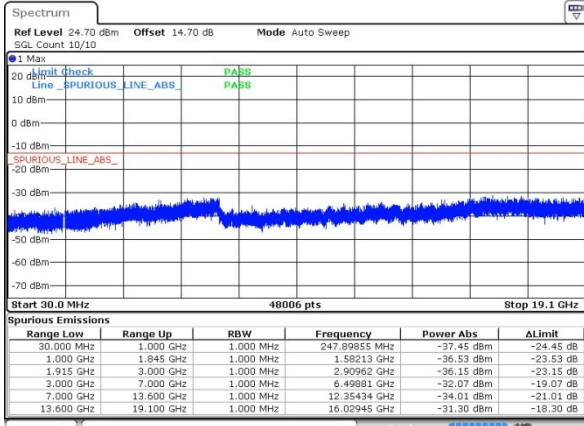


Date: 30 MAR 2019 13:38:13



GSM1900 (GPRS class 8)

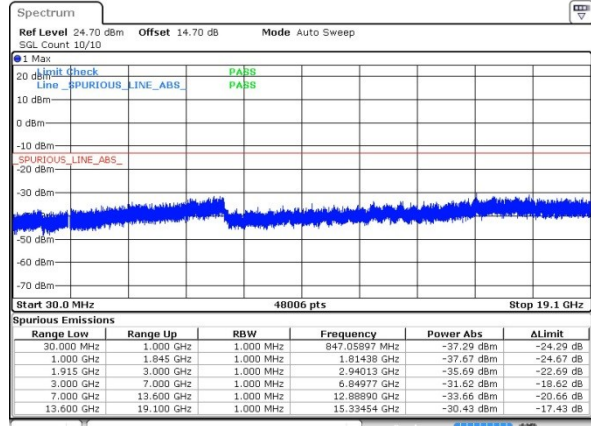
Lowest Channel



Date: 30 MAR 2019 13:55:15

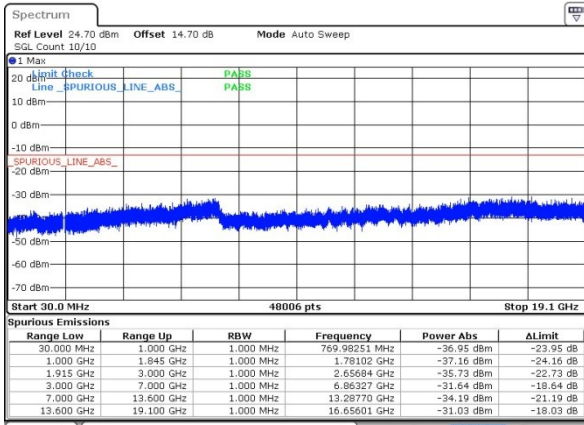
GSM1900 (EDGE class 8)

Lowest Channel



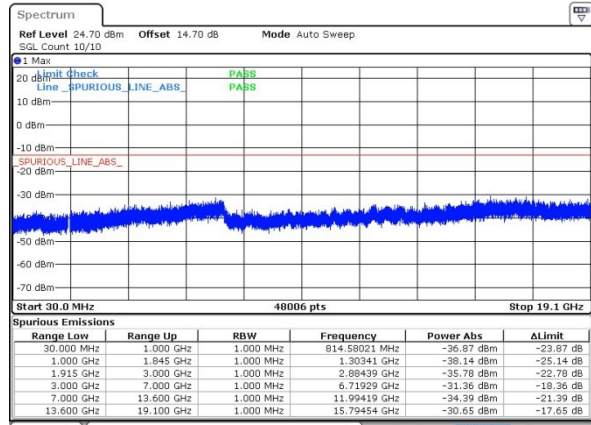
Date: 30 MAR 2019 14:13:24

Middle Channel



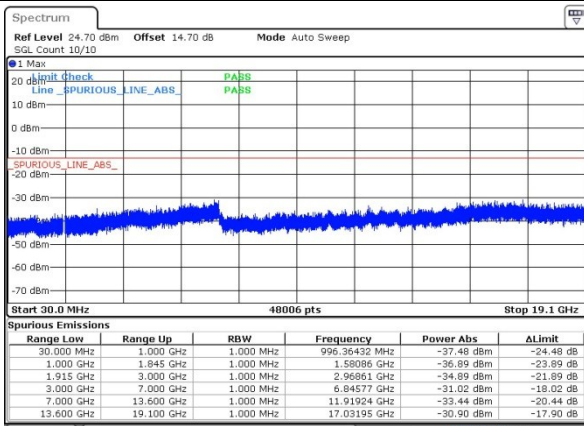
Date: 30 MAR 2019 13:58:33

Middle Channel



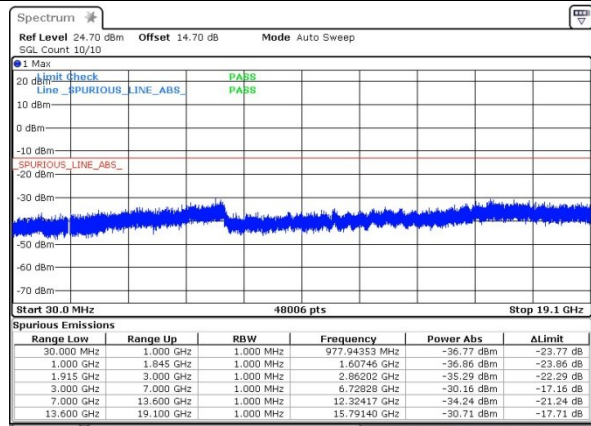
Date: 30 MAR 2019 14:14:41

Highest Channel



Date: 30 MAR 2019 13:59:51

Highest Channel

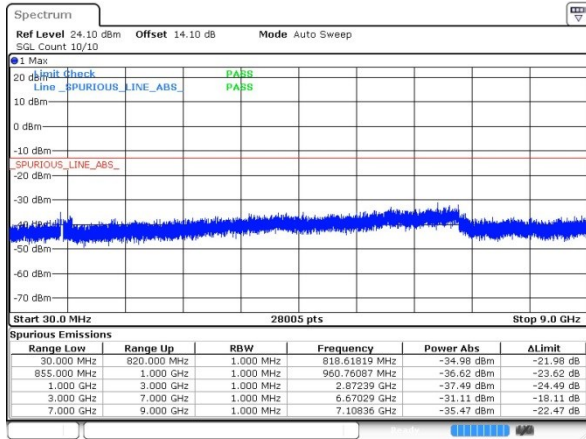


Date: 30 MAR 2019 14:16:00



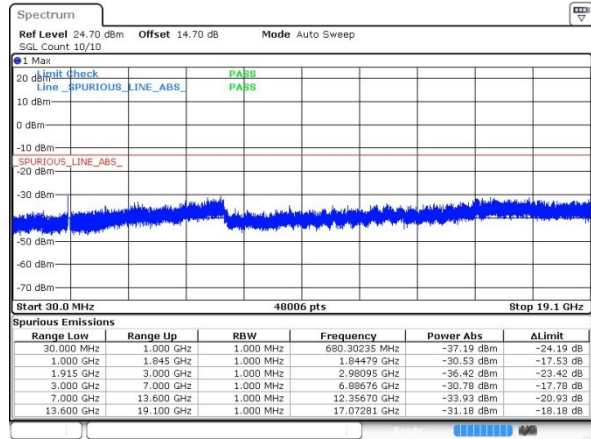
WCDMA Band V (RMC 12.2Kbps)

Lowest Channel

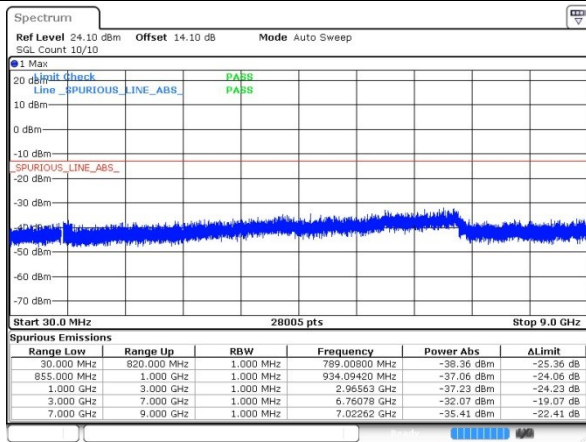


WCDMA Band II (RMC 12.2Kbps)

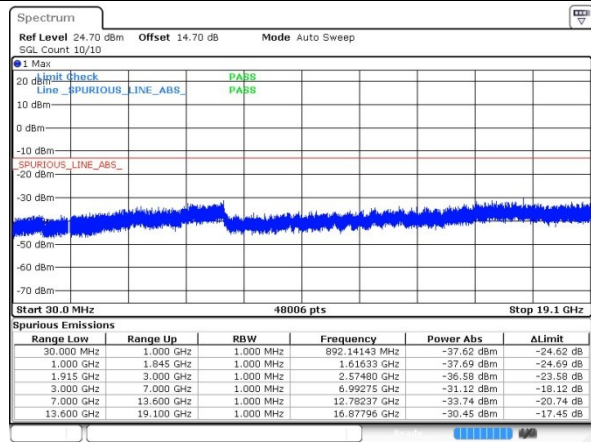
Lowest Channel



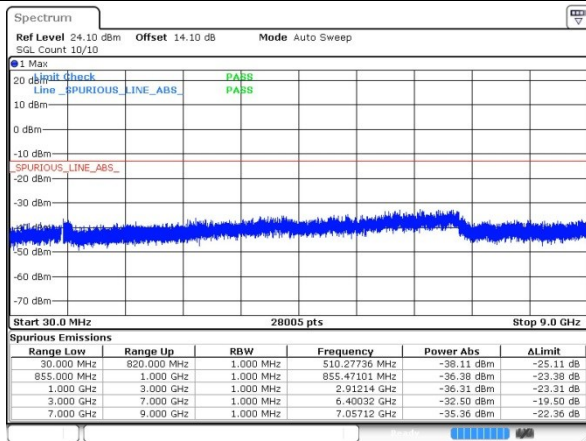
Middle Channel



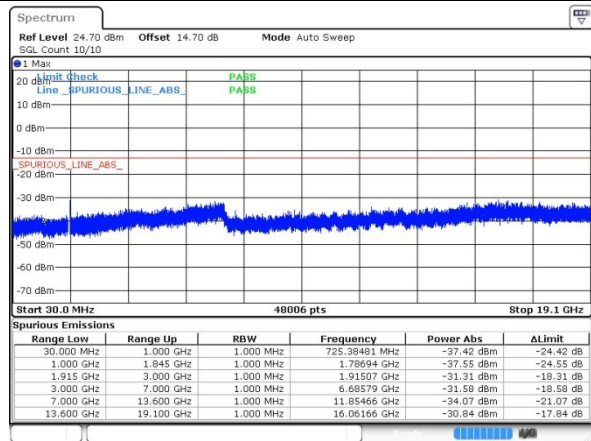
Middle Channel



Highest Channel



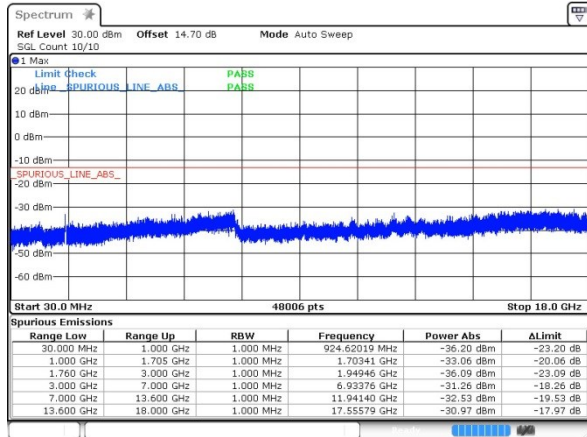
Highest Channel





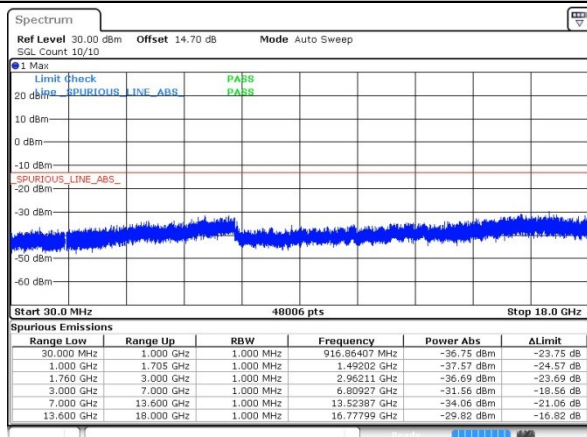
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



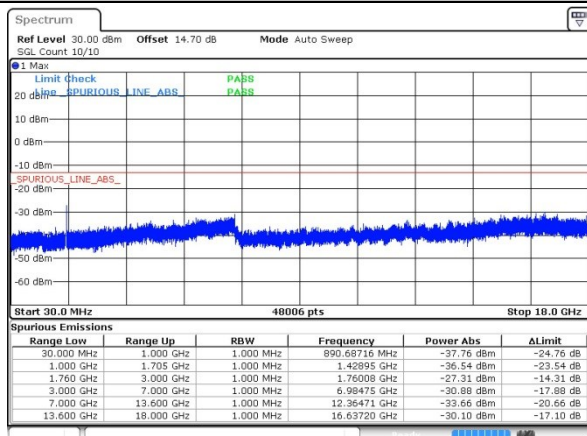
Date: 30 MAR 2019 14:49:12

Middle Channel



Date: 30 MAR 2019 14:50:31

Highest Channel



Date: 30 MAR 2019 14:52:15

**Frequency Stability**

Test Conditions	Middle Channel	GSM850 (GPRS class 8)	GSM850 (EDGE class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0048	0.0060	PASS
40	Normal Voltage	0.0526	0.0167	
30	Normal Voltage	0.0120	0.0538	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0574	0.0335	
0	Normal Voltage	0.0191	0.0538	
-10	Normal Voltage	0.0084	0.0466	
-20	Normal Voltage	0.0143	0.0167	
-30	Normal Voltage	0.0108	0.0478	
20	Maximum Voltage	0.0466	0.0514	
20	Normal Voltage	0.0155	0.0132	
20	Battery End Point	0.0395	0.0395	

Note:

1. Normal Voltage = 3.3V. ; Battery End Point (BEP) =3.8V. ; Maximum Voltage =4.3 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Test Conditions	Middle Channel	GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0053	0.0005	PASS
40	Normal Voltage	0.0016	0.0016	
30	Normal Voltage	0.0027	0.0021	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0170	0.0255	
0	Normal Voltage	0.0074	0.0186	
-10	Normal Voltage	0.0160	0.0011	
-20	Normal Voltage	0.0218	0.0037	
-30	Normal Voltage	0.0005	0.0213	
20	Maximum Voltage	0.0053	0.0160	
20	Normal Voltage	0.0021	0.0016	
20	Battery End Point	0.0133	0.0011	

Note:

1. Normal Voltage = 3.3V. ; Battery End Point (BEP) =3.8V. ; Maximum Voltage =4.3 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2KbpsRMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0060	PASS
40	Normal Voltage	0.0395	
30	Normal Voltage	0.0442	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0072	
0	Normal Voltage	0.0323	
-10	Normal Voltage	0.0048	
-20	Normal Voltage	0.0167	
-30	Normal Voltage	0.0311	
20	Maximum Voltage	0.0442	
20	Normal Voltage	0.0155	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage = 3.3V. ; Battery End Point (BEP) =3.8V. ; Maximum Voltage =4.3 V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0186	PASS
40	Normal Voltage	0.0128	
30	Normal Voltage	0.0165	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0117	
0	Normal Voltage	0.0154	
-10	Normal Voltage	0.0239	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0117	
20	Maximum Voltage	0.0165	
20	Normal Voltage	0.0005	
20	Battery End Point	0.0032	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) =3.3V. ; Maximum Voltage =4.3V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0069	PASS
40	Normal Voltage	0.0156	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0058	
-10	Normal Voltage	0.0150	
-20	Normal Voltage	0.0167	
-30	Normal Voltage	0.0092	
20	Maximum Voltage	0.0092	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0167	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) =3.3V. ; Maximum Voltage =4.3V
2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

GSM850 (GPRS class 8)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648.4	-68.99	-13	-55.99	-70.20	2.32	5.68	H
	2472	-66.07	-13	-53.07	-66.70	3.02	5.80	H
	3294	-66.78	-13	-53.78	-69.24	3.27	7.88	H
	1648	-69.14	-13	-56.14	-70.35	2.32	5.68	V
	2472.6	-66.24	-13	-53.24	-66.87	3.02	5.80	V
	3294	-66.23	-13	-53.23	-68.69	3.27	7.88	V
Middle	1672	-57.48	-13	-44.48	-58.69	2.32	5.68	H
	2510	-53.61	-13	-40.61	-54.24	3.02	5.80	H
	3348	-64.63	-13	-51.63	-67.09	3.27	7.88	H
	1672	-57.57	-13	-44.57	-58.78	2.32	5.68	V
	2509.2	-61.36	-13	-48.36	-61.99	3.02	5.80	V
	3348	-63.65	-13	-50.65	-66.11	3.27	7.88	V
Highest	1698	-68.68	-13	-55.68	-69.89	2.32	5.68	H
	2546.4	-67.43	-13	-54.43	-68.06	3.02	5.80	H
	3396	-66.87	-13	-53.87	-69.33	3.27	7.88	H
	1698	-69.84	-13	-56.84	-71.05	2.32	5.68	V
	2546.4	-68.19	-13	-55.19	-68.82	3.02	5.80	V
	3396	-66.54	-13	-53.54	-69.00	3.27	7.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



GSM850 (EDGE class 8)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-69.34	-13	-56.34	-70.55	2.32	5.68	H
	2472.6	-66.22	-13	-53.22	-66.85	3.02	5.80	H
	3294	-65.89	-13	-52.89	-68.35	3.27	7.88	H
	1648.4	-68.91	-13	-55.91	-70.12	2.32	5.68	V
	2472.6	-66.05	-13	-53.05	-66.68	3.02	5.80	V
	3294	-66.72	-13	-53.72	-69.18	3.27	7.88	V
Middle	1672	-58.07	-13	-45.07	-59.28	2.32	5.68	H
	2509.2	-63.71	-13	-50.71	-64.34	3.02	5.80	H
	3348	-66.20	-13	-53.20	-68.66	3.27	7.88	H
	1672	-58.59	-13	-45.59	-59.80	2.32	5.68	V
	2508	-64.37	-13	-51.37	-65.00	3.02	5.80	V
	3348	-66.28	-13	-53.28	-68.74	3.27	7.88	V
Highest	1698	-70.13	-13	-57.13	-71.34	2.32	5.68	H
	2546.4	-68.10	-13	-55.10	-68.73	3.02	5.80	H
	3396	-66.20	-13	-53.20	-68.66	3.27	7.88	H
	1698	-70.36	-13	-57.36	-71.57	2.32	5.68	V
	2546.4	-68.09	-13	-55.09	-68.72	3.02	5.80	V
	3396	-66.52	-13	-53.52	-68.98	3.27	7.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



GSM1900 (GPRS class 8)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3699	-61.02	-13	-48.02	-65.89	3.55	8.42	H
	5550	-57.28	-13	-44.28	-63.62	4.34	10.68	H
	7404	-52.72	-13	-39.72	-59.52	5.14	11.94	H
	3699	-59.57	-13	-46.57	-64.44	3.55	8.42	V
	5550	-54.52	-13	-41.52	-60.86	4.34	10.68	V
	7404	-52.80	-13	-39.80	-59.60	5.14	11.94	V
Middle	3759	-56.17	-13	-43.17	-61.04	3.55	8.42	H
	5640	-54.02	-13	-41.02	-60.36	4.34	10.68	H
	7524	-52.28	-13	-39.28	-59.08	5.14	11.94	H
	3759	-49.23	-13	-36.23	-54.10	3.55	8.42	V
	5640	-48.46	-13	-35.46	-54.80	4.34	10.68	V
	7524	-52.00	-13	-39.00	-58.80	5.14	11.94	V
Highest	3819	-60.48	-13	-47.48	-65.35	3.55	8.42	H
	5727	-57.37	-13	-44.37	-63.71	4.34	10.68	H
	7632	-52.17	-13	-39.17	-58.97	5.14	11.94	H
	3819	-58.90	-13	-45.90	-63.77	3.55	8.42	V
	5730	-54.73	-13	-41.73	-61.07	4.34	10.68	V
	7632	-51.81	-13	-38.81	-58.61	5.14	11.94	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



GSM1900 (EDGE class 8)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3699	-60.80	-13	-47.80	-65.67	3.55	8.42	H
	5550	-57.35	-13	-44.35	-63.69	4.34	10.68	H
	7404	-52.78	-13	-39.78	-59.58	5.14	11.94	H
	3699	-61.07	-13	-48.07	-65.94	3.55	8.42	V
	5550	-57.66	-13	-44.66	-64.00	4.34	10.68	V
	7404	-52.98	-13	-39.98	-59.78	5.14	11.94	V
Middle	3759	-60.91	-13	-47.91	-65.78	3.55	8.42	H
	5640	-57.42	-13	-44.42	-63.76	4.34	10.68	H
	7524	-52.59	-13	-39.59	-59.39	5.14	11.94	H
	3759	-59.53	-13	-46.53	-64.40	3.55	8.42	V
	5640	-57.22	-13	-44.22	-63.56	4.34	10.68	V
	7524	-51.85	-13	-38.85	-58.65	5.14	11.94	V
Highest	3819	-60.70	-13	-47.70	-65.57	3.55	8.42	H
	5730	-57.32	-13	-44.32	-63.66	4.34	10.68	H
	7644	-51.97	-13	-38.97	-58.77	5.14	11.94	H
	3819	-59.91	-13	-46.91	-64.78	3.55	8.42	V
	5730	-57.35	-13	-44.35	-63.69	4.34	10.68	V
	7644	-51.85	-13	-38.85	-58.65	5.14	11.94	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



WCDMA Band V(RMC 12.2Kbps)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1650	-69.28	-13	-56.28	-70.49	2.32	5.68	H
	2474.1	-66.15	-13	-53.15	-66.78	3.02	5.80	H
	3300	-66.71	-13	-53.71	-69.17	3.27	7.88	H
	1649.4	-69.59	-13	-56.59	-70.80	2.32	5.68	V
	2474	-67.05	-13	-54.05	-67.68	3.02	5.80	V
	3300	-67.24	-13	-54.24	-69.70	3.27	7.88	V
Middle	1674	-66.65	-13	-53.65	-67.86	2.32	5.68	H
	2510	-67.06	-13	-54.06	-67.69	3.02	5.80	H
	3348	-66.69	-13	-53.69	-69.15	3.27	7.88	H
	1674	-70.44	-13	-57.44	-71.65	2.32	5.68	V
	2509.56	-67.96	-13	-54.96	-68.59	3.02	5.80	V
	3348	-66.86	-13	-53.86	-69.32	3.27	7.88	V
Highest	1696	-69.05	-13	-56.05	-70.26	2.32	5.68	H
	2544.93	-67.33	-13	-54.33	-67.96	3.02	5.80	H
	3396	-66.56	-13	-53.56	-69.02	3.27	7.88	H
	1696	-70.06	-13	-57.06	-71.27	2.32	5.68	V
	2544.93	-68.46	-13	-55.46	-69.09	3.02	5.80	V
	3396	-66.26	-13	-53.26	-68.72	3.27	7.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



WCDMA Band II(RMC 12.2Kbps)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3705	-61.50	-13	-48.50	-66.37	3.55	8.42	H
	5556	-57.87	-13	-44.87	-64.21	4.34	10.68	H
	7404	-52.73	-13	-39.73	-59.53	5.14	11.94	H
	3705	-61.11	-13	-48.11	-65.98	3.55	8.42	V
	5556	-57.18	-13	-44.18	-63.52	4.34	10.68	V
	7404	-52.87	-13	-39.87	-59.67	5.14	11.94	V
Middle	3759	-60.92	-13	-47.92	-65.79	3.55	8.42	H
	5640	-57.39	-13	-44.39	-63.73	4.34	10.68	H
	7524	-52.82	-13	-39.82	-59.62	5.14	11.94	H
	3759	-60.68	-13	-47.68	-65.55	3.55	8.42	V
	5637	-55.66	-13	-42.66	-62.00	4.34	10.68	V
	7524	-52.08	-13	-39.08	-58.88	5.14	11.94	V
Highest	3816	-60.73	-13	-47.73	-65.60	3.55	8.42	H
	5724	-57.52	-13	-44.52	-63.86	4.34	10.68	H
	7632	-52.14	-13	-39.14	-58.94	5.14	11.94	H
	3816	-60.85	-13	-47.85	-65.72	3.55	8.42	V
	5721	-55.87	-13	-42.87	-62.21	4.34	10.68	V
	7632	-51.96	-13	-38.96	-58.76	5.14	11.94	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



WCDMA Band IV(RMC 12.2Kbps)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3423	-61.63	-13	-48.63	-66.35	3.41	8.13	H
	5136	-58.09	-13	-45.09	-64.10	4.20	10.20	H
	6852	-54.26	-13	-41.26	-60.71	4.91	11.36	H
	3423	-60.56	-13	-47.56	-65.28	3.41	8.13	V
	5136	-57.62	-13	-44.62	-63.63	4.20	10.20	V
	6852	-54.28	-13	-41.28	-60.73	4.91	11.36	V
Middle	3468	-60.39	-13	-47.39	-65.11	3.41	8.13	H
	5199	-58.19	-13	-45.19	-64.20	4.20	10.20	H
	6930	-54.33	-13	-41.33	-60.78	4.91	11.36	H
	3468	-59.43	-13	-46.43	-64.15	3.41	8.13	V
	5193	-56.60	-13	-43.60	-62.61	4.20	10.20	V
	6930	-54.28	-13	-41.28	-60.73	4.91	11.36	V
Highest	3504	-61.43	-13	-48.43	-66.15	3.41	8.13	H
	5259	-57.96	-13	-44.96	-63.97	4.20	10.20	H
	7008	-53.76	-13	-40.76	-60.21	4.91	11.36	H
	3507	-58.35	-13	-45.35	-63.07	3.41	8.13	V
	5259	-57.39	-13	-44.39	-63.40	4.20	10.20	V
	7008	-53.55	-13	-40.55	-60.00	4.91	11.36	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.